

**POLARIZATION TRANSFORMER AND POLARIZATION MODE
DISPERSION COMPENSATOR**

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5 **ABSTRACT OF THE DISCLOSURE**

[43] A polarization transformer can be constructed using a continuously adjustable polarization transforming device and a limited-range adjustable polarization transforming device. In general, the response time of the limited-range adjustable polarization transforming device is faster than that of the continuously adjustable polarization transforming device. When the two devices are properly controlled using error signals derived from a transformed optical signal, the polarization state of the optical signal can be adjusted with sufficient speed and without the loss of control associated with reset cycles.

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